

**CURRENT CLAIMS SCHEDULE:**

- 1 1. (Currently Amended) A method for controlling calls in a telecommunication system  
2 comprising the steps of:  
3 |       defining a first switching model which does not support self-routing connec-  
4 | tionless communications and in which call control signaling and media switching are ef-  
5 | fectively coupled;  
6 |       defining a second switching model which does support self-routing connec-  
7 | tionless communications and in which call control signaling and media switching are ef-  
8 | fectively decoupled, said telecommunications system being configured to switch substan-  
9 | tially no bearer traffic during said second switching model; and  
10 |       at the initiation of a call or during the progress of the call assigning one of said  
11 first and second switching models to said call.
- 1 2. (Previously Presented) The method as in claim 1, wherein said telecommunication  
2 system is a converged services platform (CSP).
- 1 3. Cancelled.
- 1 4. (Previously Presented) The method as in claim 1, wherein said step of assigning is  
2 performed on a call-by-call basis.
- 1 5. (Previously Presented) The method as in claim 1, wherein said step of assigning is  
2 performed according to a host message.
- 1 6. (Previously Presented) The method as in claim 5, wherein said step of assigning de-  
2 faults to a particular switching model in the event said host message is unavailable.

- 1 7. (Previously Presented) The method as in claim 1, wherein said step of assigning is  
2 performed dynamically one or more times during said call.
- 1 8. (Previously Presented) The method as in claim 1, further comprising the step of: pro-  
2 viding media resources arranged on a media server.
- 1 9. (Previously Presented) The method as in claim 8, wherein said media resources are  
2 selected from a group consisting of: generating tones, detecting tones, providing confer-  
3 encing, recording announcements, and playing announcements.
- 1 10. (Previously Presented) The method as in claim 8, wherein said media server is co-  
2 located with switching hardware of said telecommunication system.
- 1 11. (Previously Presented) The method as in claim 8, wherein said media server is geo-  
2 graphically remote from said switching hardware of said telecommunication system.
- 1 12. (Previously Presented) The method as in claim 1, further comprising the step of:  
2 modifying existing telecommunication switching platforms with operating software to  
3 meet capabilities of assigning one of said first and second switching models to said call.
- 1 13. (Previously Presented) The method as in claim 1, further comprising the step of: es-  
2 tablishing an early media path prior to receiving an answer to said initiation of said call.
- 1 14. (Previously Presented) The method as in claim 13, wherein said early media path  
2 plays a recorded announcement.

1 15. (Previously Presented) The method as in claim 1, further comprising the step of:  
2 transitioning between a 2-way voice path and a 2-way data path during said call.

1 16. (Currently Amended) The method as in claim 15, wherein said data path is used for  
2 transmitting data from a data communication device, ~~such as a fax or modem.~~

1 17. (Previously Presented) The method as in claim 1, further comprising the step of:  
2 augmenting a 2-way voice path with a 2-way data path during said call.

1 18. (Currently Amended) The method as in claim 17, wherein said data path is used for  
2 transmitting data from a data communication device, ~~such as a fax or modem.~~

1 19. (Previously Presented) The method as in claim 1, wherein said telecommunication  
2 system is configured as an interactive voice response (IVR) system.

1 20. (Previously Presented) The method as in claim 19, wherein said IVR system pro-  
2 vides a prepaid calling service.

1 21. (Currently Amended) ~~The method as in claim 19, further comprising the steps of:~~  
2 A method for controlling calls in a telecommunications system configured as an  
3 interactive voice response (IVR) system, said method comprising the steps of:  
4 defining a first switching model in which call control signaling and media switch-  
5 ing are effectively coupled;  
6 defining a second switching model in which call control signaling and media  
7 switching are effectively decoupled;  
8 at the initiation of a call or during the progress of the call, assigning one of said  
9 first and second switching models to said call;

10 providing a two-way RTP voice path from a first session initiation protocol end-  
11 point to a second telecommunication system having said interactive voice response sys-  
12 tem;

13 establishing a two-way TDM voice path between said interactive voice response  
14 system and with said second telecommunication system;

15 obtaining DTMF digits from said interactive voice response system;

16 after information is obtained from said interactive voice response system:

17 i) issuing messages to a second session initiation protocol end-point;

18 ii) establishing a two-way RTP voice path between said first session initiation  
19 protocol end-point and said second session initiation protocol end-point;  
20 and

21 iii) releasing said channel established between said interactive voice response  
22 system and said second telecommunication system; and

23 establishing a two-way RTP voice path between said first end-point and said sec-  
24 ond end-point.

1 22. (Currently Amended) ~~The method as in claim 1, wherein assigning said second~~  
2 ~~switching model further comprises the steps of:~~

3 A method for controlling calls in a telecommunication system comprising the  
4 steps of:

5 defining a first switching model in which call control signaling and media switch-  
6 ing are effectively coupled;

7 defining a second switching model in which call control signaling and media  
8 switching are effectively decoupled;

9 at the initiation of a call or during the progress of the call, assigning one of said  
10 first and second switching models to said call, and wherein assigning said second switch-

11 | ing model includes establishing a two-way RTP voice path between a first session initia-  
12 tion protocol end-point and a second session initiation protocol end-point, by said tele-  
13 communication system performing the following:

- 14 i) receiving a message from said first end-point and in response thereto, issu-  
15 ing a Request for Service with a data message to an associated host, with  
16 Session Description Protocol data of said first end-point contained within  
17 said data message, via an application programming interface with said  
18 host;
- 19 ii) receiving a Route Control message generated by said host, and in response  
20 signaling a call to said second end-point using an available voice over IP  
21 channel;
- 22 iii) issuing to said second end-point an invite message, which includes said  
23 first end-point Session Description Protocol as data, and waiting for said  
24 second end-point to return a ringing message;
- 25 iv) in response, issuing a ringing message to said first end-point and subse-  
26 quently receiving from said second end-point, an OK message indicating  
27 that said second end-point is available to accept said call initiated by said  
28 first end-point;
- 29 v) issuing a message to said host with information regarding said first and  
30 second end-points and waiting for said host to respond with a message in-  
31 structing said telecommunication system to process said call in accordance  
32 with said second switching model; and
- 33 vi) issuing further messages to establish a two-way RTP voice path between  
34 said first and second end-points.

1 23. (New) The method as in claim 22, wherein said invite message is a SIP INVITE  
2 message.

1 24. (Previously Presented) The method as in claim 22, further comprising the step of:  
2 establishing an early media path between said telecommunication system and said host to  
3 establish a two-way RTP early voice path between said first and second end-points.

1 25. (Previously Presented) The method as in claim 24, wherein said second end-point  
2 plays a recorded announcement via said RTP early voice path.

1 26. (Previously Presented) The method as in claim 25, wherein a media server is acting  
2 on behalf of said second end-point.

1 27. (Previously Presented) The method as in claim 22, further comprising the step of:  
2 transitioning from said two-way RTP voice path to a two-way RTP data path upon said  
3 telecommunication system receiving a re-invite message from said second session initia-  
4 tion protocol end-point.

1 28. (Previously Presented) The method as in claim 27, wherein said re-invite message is  
2 a SIP RE-INVITE message.

1 29. (Previously Presented) The method as in claim 27, further comprising the steps of:  
2 providing an internal media data transfer at said telecommunication system; and  
3 issuing a re-invite message to said first end-point, to establish a two-way RTP  
4 Data path between said first end-point and said second end-point.

1 30. (Currently Amended) A telecommunication system comprising:  
2 switching hardware having circuitry for operating under a first switching model  
3 and in which call control signaling and media switching are effectively coupled, and a  
4 second switching model which does support self-routing connectionless communications

5 | and in which call control signaling and media switching are effectively decoupled, said  
6 | telecommunication system being configured to switch substantially no bearer traffic; and  
7 | a processor to assign one of said first and second switching models to said call at  
8 | the initiation of a call or during the progress of the call.

1 31. (Previously Presented) The telecommunication system as in claim 30, wherein said  
2 telecommunication system is a converged services platform (CSP).

1 32. Cancelled.

1 33. (Previously Presented) The telecommunication system as in claim 30, wherein said  
2 processor assigns said switching models on a call-by-call basis.

1 34. (Previously Presented) The telecommunication system as in claim 30, wherein said  
2 processor assigns said switching models in response to a host message.

1 35. (Previously Presented) The telecommunication system as in claim 34, wherein said  
2 step of assigning defaults to a particular switching model in the event said host message  
3 is unavailable.

1 36. (Previously Presented) The telecommunication system as in claim 30, wherein said  
2 processor assigns said switching models dynamically one or more times during said call.

1 37. (Previously Presented) The telecommunication system as in claim 30, further com-  
2 prising: a media server for providing media resources.

1 38. (Previously Presented) The telecommunication system as in claim 37, wherein said  
2 media resources are selected from a group consisting of: generating tones, detecting  
3 tones, providing conferencing, recording announcements, and playing announcements.

1 39. (Previously Presented) The telecommunication system as in claim 37, wherein said  
2 media server is co-located with switching hardware of said telecommunication system.

1 40. (Previously Presented) The telecommunication system as in claim 37, wherein said  
2 media server is geographically remote from said switching hardware of said telecommu-  
3 nication system.

1 41. (Previously Presented) The telecommunication system as in claim 30, further com-  
2 prising: operating software for modifying existing telecommunication switching plat-  
3 forms to meet capabilities of assigning one of said first and second switching models to  
4 said call.

1 42. (Previously Presented) The telecommunication system as in claim 30, wherein an  
2 early media path is established prior to receiving an answer to said initiation of said call.

1 43. (Previously Presented) The telecommunication system as in claim 42, wherein said  
2 early media path is utilized for playing a recorded announcement.

1 44. (Previously Presented) The telecommunication system as in claim 30, wherein said  
2 switching hardware transitions between a 2-way voice path and a 2-way data path during  
3 said call.

1 45. (Previously Presented) The telecommunication system as in claim 30, wherein said  
2 switching hardware augments a 2-way voice path with a 2-way data path during said call.



1 46. (Currently Amended) The telecommunication system as in claim 44, wherein said  
2 data path is used for transmitting data from a data communication device, ~~such as a fax or~~  
3 ~~modem~~.

1 47. (Previously Presented) The telecommunication system as in claim 30, wherein said  
2 telecommunication system is configured as an interactive voice response (IVR) system.

1 48. (Previously Presented) The telecommunication system as in claim 47, wherein said  
2 IVR system provides a prepaid calling service.

1 49. (Currently Amended) A telecommunication system comprising:

2 means for defining a first switching model which does not support self-routing  
3 connectionless communications and in which call control signaling and media switching  
4 are effectively coupled;

5 means for defining a second switching model which does support self-routing  
6 connectionless communications and in which call control signaling and media switching  
7 are effectively decoupled, said telecommunications system being configured to support  
8 substantially no bearer traffic during said secondary switching model; and

9 means for assigning one of said first and second switching models to said call at  
10 the initiation of a call or during the progress of the call.